

ABSTRACT

An optical assembly, such as a multiple output diode laser pump source for EDFAs, is formed by pressing an optical array emitter chip against a standoff structure protruding from a submount such that the emitter chip deforms to match the curvature of the standoff structure. An IO chip is also juxtaposed against the standoff structure such that its optical receivers can receive optical energy from the emitter chip. The IO chip can provide various optical functions, and then provide an optical array output for coupling into an optical fiber array. The standoff structure preferably contacts the emitter chip over an aggregate contact area much smaller than the area by which the emitter chip overlaps the submount. The materials used for bonding the emitter chip and the IO chip to the submount are disposed in the recesses between standoffs and not on the contact surfaces of the standoff structure.